

Industrial Technologies Program
Energy Efficiency and Renewable Energy • U.S. Department of Energy

R&D 100 Awards

Industrial Technologies Program-Supported R&D 100 Award Winners

1991

Petroleum Sludge Treatment Process
Pacific Northwest National Laboratory

Planar Waveguide Spectrometer
Pacific Northwest National Laboratory

X-Ray Tomographic Microscope
Lawrence Livermore National Laboratory

1992

CFC/HFC Ratiometer
Oak Ridge National Laboratory

Solar Detoxification of Hazardous Organic Materials in Groundwater
National Renewable Energy Laboratory,
Sandia National Laboratory

1993

Data Gator Flowmeter
Yellowstone Environmental Science

1995

Waste Tire Utilization (Chemicals)
Composite Particles, Inc.

Exo-melt Process
Oak Ridge National Laboratory

Polymer Filtration System
Los Alamos National Laboratory, Boeing
Defense and Space Group

New Methods for Making Silicon Carbide Powders
National Renewable Energy Laboratory,
Golden Technologies Company

1996

Oxygen-Enriched Air Staging Technology (Glass)
Institute for Gas Technology

1997

Plastics, Fibers, & Solvents from Biosynthetically Derived Organic Acids (Chemicals)
Oak Ridge National Laboratory, National
Renewable Energy Laboratory, Pacific
Northwest National Laboratory, Argonne
National Laboratory, Applied
CarboChemicals, University of Illinois -
Urbana, A.E. Staley, Engelhardt and New
Horizon Engineering

New Technology for Sulfide Reduction and Increased Oil Recovery (I&I)
The LATA Group

1998

Life-Cycle Advantage Software
Pacific Northwest National Laboratory

MACLEAN/MICARE Solvent Cleaning Systems (Chemicals)
Pacific Northwest National Laboratory,
MICELL Technologies

Rapid Solidification Process Tooling (Currently funded by Metal Casting, Materials)
Idaho National Energy and Environmental
Laboratory

1999

Robotics Inspection System for Storage Tanks (Petroleum, NICE³)
Solex Environmental Systems

Development of Exo-melt Process Enables Melting of Nickel Aluminides in Industry (AIM)
Oak Ridge National Laboratory

2000

Process to Recover and Clean Flexible Polyurethane Foam from Automobile Shredder Residue (Chemicals)
Argonne National Laboratory

Characterization Tool for the Wood and Pulp Industry, Near-Infrared Sensor for Moving Wood Chips (Forest Products)
National Renewable Energy Laboratory

2002

Supercritical Purification of Compounds used for Combinatorial Chemical Analysis (Chemicals, NICE³)
Berger Instruments

Advanced Electrodeionization Technology for Product Purification, Waste Recovery, and Water Recycling (Chemicals)
Argonne National Laboratory

Horizon Sensing (Mining)
Stolar Horizon, Inc.

Fibrous Monolithic Composites as Wear Resistant Components for Mining (Mining)
Advanced Ceramics Research Corp.



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